

## **EPA REGION 2** CONGRESSIONAL DIST. 06 Middlesex County Edison

## Site Description

The former Raritan Arsenal site, located in Middlesex County, New Jersey on the banks of the Raritan River, consisted of approximately 3,200 acres and was actively operated by the Army between 1917 and 1963. Operations at the site consisted of the receipt, storage, shipment and/or decommissioning of ordnance, arms and machinery. During this period, some waste materials including ordnance and chemical agents (mustard gas, red nitric acid, and miscellaneous chemicals) reportedly were buried on-site. Also, it has been reported that explosive materials were destroyed by surface burning or burning in chamber pits. Accidental explosions in magazine buildings and outdoor storage areas reportedly scattered explosive materials over large areas, and forced ordnance fragments into the ground. Studies by the Army and EPA have found volatile organic compounds, metals, pesticides and other contaminants in gound and surface water and soil at the site.

The site was decommissioned by the Army in 1963 at which time the Army conducted decontamination operations at the site as part of the phase-out process under the direction of personnel from the Letterkenny Army Depot (LEAD) and the Army Material Command Safety Office. LEAD designated 17 areas as potentially contaminated with ordnance and/or chemicals. Subsequently, the Army recommended that each area be designated as "unrestricted use", "surface use only", or "non-use" as deemed appropriate. Areas designated as "surface use only" and "non use" included pits possibly holding potassium cyanide and mustard gas containers, and areas which potentially contained live ordnance.

In 1964, the former Raritan Arsenal was turned over to the General Service Administration (GSA) for its use and disposal as excess property. GSA sold most of the property (approximately 2,900 acres) to private parties. In addition, approximately 250 acres were transferred to EPA for EPA's Edisdon Laboratory, while 20 acres to date still remain in GSA's possession. Much of the land sold to private parties comprises the Raritan Center [2,000 acres] (the re-developed land is mostly comprised of light industrial warehouse, and office space in Raritan Center (continuing development is occurring in this area). Other portions of the former arsenal include what are now Middlesex County College and Thomas Edison Park.

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**Site Responsibility:** This site is being addressed through

Federal actions.

**NPL LISTING HISTORY** Non-NPL Site

Currently NPL determination is a low priority for listing based upon current draft removal guidance. (We are still hoping to get concurrence from HQ to NFRAP (i.e. no further remedial action planned by EPA) the site. The site's final score can't be determined until HQ guidance is finalized or HQ concurs with us on the NFRAP. The State has requested that EPA not list the site on the NPL. The community has been pleased with the Army's continued clean-up activities with the State as the "lead" regulatory agency overseeing the project.

## Response Action Status —

**Immediate Actions:** EPA - In summer of 1990, fences were installed around Areas 4 (possible TNT, lead) and 5 (possible mustard agent, potassium cyanide, red fuming nitric acid) under IAG with Army.

ARMY - Removals for ordnance near completion: in excess of 30,000 37mm shells and 48,000 booster fuses as well as over 12,000 lbs. of TNT have been found munitions detonated on site. However, just recently, cartons of grenades were found unexpectedly in Area 11 along with some projectiles. This ordnance should be removed sometime in the near future. Interim removal actions taken at leachate pond and drum area (dredging/excavation of visibly contaminated soil) have secured these areas until later remedial action is taken. Ordnance removals will continue if new areas are uncovered during the Phase 2 RI studies

Entire Site: Remedial Investigation Status (Army conducting RI under EPA/State Oversight). Army split RI into 2 phases Phase I completed (final report)/Phase II is is near completion. Phase I most areas; Phase II rest of EPA property, inside area 5, other areas due to Phase I results. Limited Health Risk Assessment (6/93) collège ballfield and park showed high levels of lead at ballfield and some arsenic in park. Based on Army and ATSDR recommedation, park was re-opened but ballfield remained closed. Phase II RI results for ballfield still showed high lead levels in surficial soils. Army has completed the removal of contaminated soils at ballfield. The ballfield will be utilized in the fall of '96. As a result of the Army's speedy removal, the college was able to use grant money to building new athletic facilities. All original potentially contaminated areas have been investigated in Phase 2. Final RI reports were submitted to EPA/DEP for review for Areas 4, 10,18A,Bldg,118,X,H,W. Draft reports were submitted for Areas 1,2,3,6,7,8,11,15,16,20, Site Wide Hydrogeological study, and Surface Water/Sediment study. Some contaminants of concern have been heavy metals (eg lead, arsenic), pesticides, and PAHs. Area 5 (mustard agent) is still being investigated currently but field work is near completion. Some mustard contaminated soils have been removed in Area 5 along with some ordnance and chemical warfare vials. Work in Area 5 should be completed in the Spring '96. Additional studies currently continue under the Work Plan Addendum in areas warranted due to Phase 2 results and to the archival search performed by the Army (eg EPA property will be extensively studied). All work under the Work Plan Addendum should be completed by the end of '97.

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